

REMARKS

This communication responds to the Office Action mailed on July 9, 2007. No claims are amended, no claims are canceled, and no claims are added. As a result, claims 1-26 are now pending in this Application.

§103 Rejection of the Claims

Claims 1-26 were rejected under 35 USC § 103(a) as being unpatentable over Walton et al. (U.S. 2006/0039312, hereinafter “Walton”) in view of Priotti (U.S. 2004/0120410, hereinafter “Priotti”). The Applicant reserves the right to swear behind these references at a later date. The Applicant respectfully traverses the rejection of claims 1-26 under 35 USC § 103(a) for the reasons stated below.

In order for the Examiner to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicant respectfully submits that the Office Action did not establish a *prima facie* case of obviousness, because, even when combined, the cited references do not teach or suggest all the claim limitations set forth in the rejected claims.

Claim 1 recites:

1. A method, including:
 converting a combined plurality P of asynchronous data streams received at substantially the same time from a first time domain to a frequency domain;
 separating the combined plurality P of asynchronous data streams into a separated plurality of data streams in the frequency domain; and
 synchronizing at least one of the separated plurality of data streams in a second time domain.
(Emphasis added)

The Office asserts, “Walton discloses a method (Figures 9 and 10a), including: converting a combined plurality P of asynchronous data streams received at substantially the same time (Figures 10a, 852a...854r all received in time domain) from a first time

domain to a frequency domain (Figure 9, paragraphs 242-244); separating the combined plurality P of asynchronous data streams into a separated plurality of data streams in the frequency domain (Figure 9, S1...Snd are asynchronous data streams in frequency domain)", as recited in claim 1. However, a close reading of Walton reveals this is not the case.

FIG. 9 of Walton shows an example coding and modulation scheme that may be used with full or partial CSI to provide improved performance (e.g., high throughput).

FIG. 10A of Walton is a block diagram of an embodiment of a receiver unit 1000a.

The Office correctly admits, "Walton fails to teach synchronizing at least one of the separated plurality of data streams in a second time domain." The Applicant further submits that Walton does not show converting a **combined plurality P of asynchronous** data streams from a time domain to a frequency domain, as recited in claim 1. The Office maintains that Walton in FIG. 10a shows that "852a...854r are all received in time domain". However, this assertion does not justify the conclusion that Walton discloses converting a **combined asynchronous** data streams from a time domain to a frequency domain as recited in claim 1, at least because (1) the Office does not point out, and the Applicant was unable to find any teaching within the bounds of Walton to show that the signals received at 852a...854r are **asynchronous**, and (2) Walton does not disclose that these signals are **combined** data streams, which are to be converted from a time domain to a frequency domain. Referring to Walton, para 237:

"The modulation symbols from TX data processor 814x are provided to TX MIMO processor 820x. **TX MIMO processor 820x receives N_b modulation symbol streams from N_b channel data processors 910 and demultiplexes the received modulation symbols into N_r symbol vector streams, V_1 through V_{N_r}** , one symbol vector stream for each antenna used to transmit data. Each symbol vector stream is provided to a respective modulator 822..." (Emphasis added)

According to Walton, then, **MIMO processor 820x** receives **separated** (rather than combined) symbol streams and demultiplexes the received modulation symbols into N_r symbol vector streams, while claim 1 recites **combined** data streams that are converted from the time domain to the frequency domain. Thus, Walton adopts a different approach from what is recited in Applicant's claim 1.

Further, the Applicant submits that Walton does not show “**separating the combined plurality P of asynchronous data streams into a separated plurality of data streams in the frequency domain**”, as recited in claim 1. The Office argues that “S1...Snd are **asynchronous** data streams in frequency domain” (Emphasis added). However, the Office does not point out, and the Applicant was unable to find anything within the bounds of Walton teaching that signals S1...Snd, are asynchronous data streams as asserted by the Office. In addition, as argued above, Walton does not disclose converting a **combined** data streams from a time domain to a frequency domain as recited in claim 1. Indeed, there is no need for Walton to separate the converted signals (e.g., see FIG. 9, S1 ... SNd), because such converted signals are already separated, rather than combined.

In summary, Walton does not disclose the claim elements of “**converting a combined plurality P of asynchronous data streams received at substantially the same time from a first time domain to a frequency domain**” and “**separating the combined plurality P of asynchronous data streams into a separated plurality of data streams in the frequency domain**” as recited in claim 1.

Finally, the Office does not point out, and the Applicant was unable to find teaching within the bounds of Priotti that discloses this missing element. The Office asserts that Priotti teaches synchronization in the time domain. However, this assertion does not justify the conclusion that Priotti discloses synchronizing data streams in the time domain **after** separation in the frequency domain, as claimed in claim 1.

Thus, even when combined, Walton and Priotti do not teach or suggest all the claim elements set forth in claim 1. Accordingly, the Office has not established a *prima facie* case of obviousness to claim 1.

Independent claims 8, 14, 19, and 22 have similar elements to independent claim 1, and therefore, the conclusion with respect to independent claim 1 also applies to independent claims 8, 14, 19, and 22. The Applicant thus respectfully requests reconsideration and allowance of independent claims 1, 8, 14, 19, and 22, as well as dependent claims 2-7, 9-13, 15-18, 20-21, and 23-26, since any claim depending from a nonobvious independent claim is also nonobvious. See MPEP § 2143.03.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, the Applicant may not have addressed every assertion made in the Office Action. The Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. The Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. The Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, the Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. The Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

The Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney at (210) 308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

QINGHUA LI ET AL.

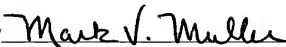
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